

# Quantification of Public Benefits of Water Storage Eligible for Public Funds in SBx7-2

Status Briefing for the CWP Update  
Finance Caucus  
August 17, 2011

# Topics

- SBx7-2
  - Bond funding for public benefits of water storage
  - Categories of eligible public benefits as defined by the law
  - Roles of CWC, DWR, DFG, SWRCB
  - Other criteria for public funding
- Current work
  - Status
  - Schedule
  - Products

# Background on SBx7-2

- Safe, Clean, and Reliable Drinking Water Supply Act of 2010
- Would provide \$3B in bond funding for eligible public benefits of water storage projects that:
  - Improve operation of the state water system
  - Are cost-effective
  - Provide net improvement in ecosystem and WQ conditions (must provide “measurable improvements to the Delta ecosystem or (its) tributaries”)
- Funding contingent on statewide passage of bond

# Eligible Projects

- Surface storage projects identified in the CALFED Bay-Delta Program ROD
- Groundwater storage projects and GW contamination prevention or remediation projects that provide water storage benefits
- Conjunctive use and reservoir re-op. projects
- Local and regional surface storage projects that improve the operation of water systems in the state and provide public benefits

# SBx7-2 Section 79744

- CWC shall develop and adopt, by regulation, **methods for quantification** and management of public benefits described in Section 79743 by December 15, 2012. The regulations shall include the priorities and relative environmental value of ecosystem benefits as provided by DFG and the priorities and relative environmental value of water quality benefits as provided by the SWRCB.

# Public Benefits Eligible for Funding Under SBx7-2

- (1) “**Ecosystem improvements**, including changing the timing of water diversions, improvement in flow conditions, temperature, or other benefits that contribute to restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta.”

# Public Benefits Eligible for Funding Under SBx7-2

(2) “**Water quality improvements** in the Delta, or in other river systems, that provide significant public trust resources, or that clean up and restore groundwater resources.”

# Public Benefits Eligible for Funding Under SBx7-2

(3) “**Flood control benefits**, including, but not limited to, increases in flood reservation space in existing reservoirs by exchange for existing or increased water storage capacity in response to the effects of changing hydrology and decreasing snow pack on California’s water and flood management system.”



# Public Benefits Eligible for Funding Under SBx7-2

(4) “**Emergency response**, including, but not limited to, securing emergency water supplies and flows for dilution and salinity repulsion following a natural disaster or act of terrorism.”

# Public Benefits Eligible for Funding Under SBx7-2

(5) “**Recreational purposes**, including, but not limited to, those recreational pursuits generally associated with the outdoors.”

# Other Related Provisions in SBx7-2

- No funds allocated for public benefits until:
  - Regulations adopted
  - Public benefits are quantified and costs assigned to public and non-public benefits
  - DWR has signed contracts with all parties receiving non-public benefits
  - Each party's share of total project costs "consistent" with its benefit
- Note that these require a cost allocation

# Current Work on Public Benefits Quantification

- What is a “benefit”?
  - With- vs. without-project
  - Analysis perspective – Benefits should be from the State’s perspective
- What is a “public benefit”?
  - Economic definition of public benefits
    - Enjoyed jointly by many at once
    - Difficult to exclude people from receiving benefit
  - Compare to 5 categories defined as eligible

# Ways to Quantify Benefits

- Quantification of physical changes is required
- Acceptable methods for economic quantification
  - Direct observation of values or behavior
  - Survey-based methods
  - Avoided cost or avoided damage
  - Alternative cost
  - Adapt values estimated from other studies

# Resources for Benefits Quantification

- Federal “Principles and Guidelines” for water resources development: national benefits analysis
- Implementation manuals for economic analysis by federal agencies (e.g., USACE, USBR)
- DWR’s Economic Analysis Guidebook
- Note: federal guidelines must be followed for federal participation

# Current Status of Work

- Prepared draft summary of methods and criteria
- Compiling and describing available applications and specific models
- Sending letter to academic and agency experts
- Agencies developing priorities for environmental and water quality benefits

# Schedule and Products

- Report on available methods, evaluation, and recommendations in October
- Organized by the five public benefits categories
- Provide input on developing a regulation and guidelines
  - Regulation to be adopted by CWC by December 2012



# Next Steps

- Provide additional updates to Finance Caucus
- Requests for finance caucus input
  - Advice on methods
  - Review of interim products
  - Recommendations for regulation and guidelines

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